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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,570	09/21/2001	Meng-Shin Yen	APIP0101USA	1375

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 05/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/682,570

Applicant(s)

YEN ET AL

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Applicants' response of 3/1/02 has been considered with the following results.

Drawings

The new figures and the amendment to figure 1 is acknowledged and approved. The examiner thanks applicants' and their representative for the corrections.

Specification

The amendment to the title of the invention is noted. The examiner thanks applicants' and their representative for the corrections.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claims 1-8, 10 -17, 19 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The valid address recognition/ability is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). As disclosed, nothing occurs unless/until valid address is determined. Such is necessary for the invention as disclosed to continue to operate. This limitation is not found in either of the independent claims 1 or 10. This limitation is found in dependent claims 9 and 18. The examiner strongly urges that this limitation be included in both of the independent claims.

Response to Arguments

Applicant's arguments filed 3/1/02 have been fully considered but they are not persuasive. Although applicants' explanation in his communication of March 1st, 2002 attempts to describe in alternative operation of the invention, the examiner maintains the grounds of rejection because as disclosed there is only the embodiment with the valid address requirement found in the specification.

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2. Claims 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Furthermore, claim 19 is an apparatus claim, and yet attempts to cross both method and apparatus limitations found in the independent claims. The examiner is not sure what the limitations of this claim are limited to. In the rejections below, claim 19 is interpreted merely as apparatus. Applicants' are attempting to define a system (apparatus) as a dependent claim upon a method of operation and as such is improper under present USPTO practice.

AS FAR AS THE CLAIMS RECITE POSITIVE LIMITATIONS and as interpreted by the examiner (as indicated below) the following art rejections are made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

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examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 4, 5, 6, 7, 8, 10, 12, 13, 14, 15, 16, 17 and 19 are rejected under 35 U.S.C. 103(a) as obvious over the acknowledged prior art further considered with Finkelstein et al and all further considered with Nakane et al.

The acknowledged prior art system describes an optical disc accessing system (and method for when in operation). As such, this system must inherently have the rotating mechanism (and method step thereof), the data access device for recording information onto the track of the optical disc, the control device operating as stated in the wherein clause. It is noted that claims 8 and 17 are drawn to a clv system – which applicants have admitted as being the prior art. Claims 3, 4, 12 and 13 are drawn to CAV track format and this is also part of the acknowledged prior art. With respect to the limitations of claims 15, 16 (and 6 and 7), because as disclosed information is recorded there is inherently the appropriate recording speed – control signal.

The examiner concludes that from the description of the prior art, a spiral track is found/inherently present. If this is not the case, then the examiner would under 103 considerations take Official notice of – ADMITTED PRIOR ART – SEE MPEP 2144.03 - spiral track format as first found on LPs (vinyl records, long playing 33 and 1/3 rpm).

The ability to have the record track format as being a spiral track would have been obvious to one of ordinary skill in the art, because selection of existing track format (spiral or concentric) is considered merely a selection between one of two formats in this environment and purely a users choice especially because no unexpected results are seen to occur (occur from) selecting one equivalent track format over another.

The examiner also concludes that the use of a LUT (look up table) in the acknowledged prior art is also inherently found. The examiner comes to this conclusion because the use of LUT in this environment is standard operating procedure for control purposes. Citation and/or identification of the acknowledged prior art is respectfully requested.

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Alternatively, if applicants' can convince the examiner that such is not inherently found in the reference, then the examiner would rely upon Finkelstein et al for teaching in this environment the ability of using/having a LUT in an disc accessing system/ AND Fischler et al.

Fischler et al discloses the ability of having a microprocessor appropriately control the electronics of a constant density recording/reproducing system using the microprocessor as the control element.

The examiner interprets the microprocessor controller to be inherently present in Finkelstein et al – see element 20, and provides the appropriate steps/means limitations now recited in the independent claims. Alternatively, if applicants' could convince the examiner that control of the appropriate system's parameters/electronics are not contained-disclosed in Finkelstein et al, then the examiner relied upon Fischler et al for teaching such

It would have been obvious to one of ordinary skill in the art to modify the base reference of the acknowledged prior art with the teaching(s) from Finkelstein et al/ Fischler et al motivation being to control the laser beam accordingly – see col. 4, lines 8 plus, or alternatively control the electronics of the system – see col. 6 lines 34-48 in Fischler et al. This combination also meets the limitations of claims 5 and 14.

4. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 10 above, and further in view of either of the Ottesen et al references.

These claims are interpreted by the examiner to define the zbr recording format is taught by either of the Ottesen et al references.

It would have been obvious to one of ordinary skill in the art to modify the base reference of the prior art as relied upon with respect to claims 1 and 10 with the teaching(s) from either of the Ottesen et al references, motivation being to provide for an improved allocation of information on the disc storage media as recognized by Ottesen et al.

5. Claims 6, 7, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art as applied to claims 1 and 10 above, and further in view of Inagaki et al.

Alternatively, if applicants can convince the examiner that the limitations of these claims are not inherently present in the acknowledged prior art system(s), and then the examiner relies upon this capability as taught in the Inagaki et al reference.

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It would have been obvious to one of ordinary skill in the art to modify the base references of the acknowledged prior art as relied upon with respect to claims 1 and 10 with the teaching(s) from Inagaki et al. The additional provision of the recording frequency provides for a more precise power control capability saves on over all power considerations by using the appropriate designated power levels.

6. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 10 above, and further in view of Dakin et al.

The ability of using a range of address per block is considered taught by the Dakin et al reference – note the address ranges for his accessing random tracks.

The ability to make a determination if the target track is accessed properly is interpreted as the valid range and the operation of the Dakin et al system is further interpreted as providing the appropriate method.

Response to Arguments

Applicant's arguments with respect to claims 1 et al have been considered but are moot in view of the new ground(s) of rejection.

7. Claims 1,2,3,4,6,7,8,9, 10, 11,12,13,15,16,17,18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al considered with Fischler et al/Finkelstein et al and the admitted prior art.

The Nakane et al reference discloses a ZCLV system in an optical environment having the appropriate CLV in zones as required/interpreted/argued by applicants. Nakane et al uses header info. with respect to establishing the appropriate system parameters for control purposes.

The ability of having a microprocessor/controller using lookup tables for appropriate controlling of the electronics or system operations is taught by high to the Fischler et al or Finkelstein et al references. Applicants' attention is drawn to col. 6 lines 34 through 48 in the Fischler et al reference.

It would have been obvious to one of ordinary skill in the art to modify the basic system of Nakane et al with the teaching from either Fischler et al or Finkelstein et al, motivation is to save recording areas upon the disc, and as further taught in Fischler et al reconfigure the electronics quickly and avoiding the necessity of mechanical linkages in or changes in spindle rotation rate.

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With respect to the limitations of claims 2 & 11, although Nakane et al discusses non-uniform size (equal) as not being necessary, obviously equal size is also discussed.

With respect to claims 3 and 12, this is CLV requirement.

With respect to claims 4 and 13, the examiner interprets such limitations as inherently present in CLV systems.

With respect to claims 6,7,15 and 16, the LUT of Fischler et al refers to speed control.

With respect to claims 8, 9, 17, 18 and 19 see above discussion with respect to LUT in Fischler et al.

If the remaining elements are not inherently present in the Nakane et al base reference, then the examiner would rely upon the admitted prior art for teaching such remaining background elements necessary for the operation of an optical drive system.

8. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1 and 10 as stated above in paragraph 7, and further in view of Finkelstein et al.

Finkelstein et al discloses the power recording limitation(s) as previously discussed with respect to col. 4 lines 8 plus.

It would have been obvious to modify the references as relied upon with respect to claims 1 & 10 as stated in paragraph 7 above with the additional teaching with respect to power recording as additionally taught by Finkelstein et al, motivation is to also permit electronic control of laser power(s) as part of the overall electronics control of the Nakane et al system and provide for greater added versatility of the microprocessor control ability.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH**

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shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Aristotelis M Psitos
Primary Examiner
Art Unit 2653



AMP
April 30, 2002